



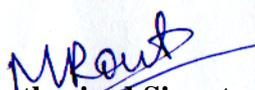
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MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Reference No : **CEMC/ASL/Dec-A-01/19**
Name of Company : **Ardent Steel Ltd.**
Sample Description : **Ambient Air**
Date of Monitoring : **13.12.2019**
Date of Receiving : **14.12.2019**
Date of Analysis : **14.12.2019**
Sample Collected by : **Mr. B Samantaray**

AMBIENT AIR QUALITY TEST REPORT (24 HOURLY AVERAGE)

Sl. No.	LOCATION	MONITORING REPORT					
		PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)	CO (mg/m^3)	NH ₃ ($\mu\text{g}/\text{m}^3$)
1	At the boundary near the water harvesting pond (East Direction)	67.4	35.3	11.7	15.8	0.5	<20
2	At the Boundary near ESP (South Direction)	71.9	36.8	12.4	16.9	0.6	<20
3	At the Boundary near Coal Fines Stock yard (North Direction)	66.5	35.4	12.1	15.6	0.5	<20
4	Near Ball mill, Iron ore fines stock yard	69.2	36.1	11.8	15.2	0.4	<20
NAAQ Standard		100 ($\mu\text{g}/\text{m}^3$)	60 ($\mu\text{g}/\text{m}^3$)	80 ($\mu\text{g}/\text{m}^3$)	80 ($\mu\text{g}/\text{m}^3$)	4.0 (mg/m^3)	400 ($\mu\text{g}/\text{m}^3$)


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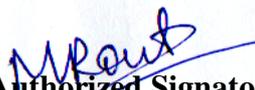
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Reference No : CEMC/ASL/Dec-F-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Fugitive Air
Date of Monitoring : 13.12.2019
Date of Receiving : 14.12.2019
Date of Analysis : 14.12.2019
Sample Collected by : Mr. B Samantaray

FUGITIVE EMISSION TEST REPORT

Sl. No.	LOCATION	RESULT	
		RSPM ($\mu\text{g}/\text{m}^3$)	SPM ($\mu\text{g}/\text{m}^3$)
1	Proportioning System (Ash & Coke Fines Bunker)	221	934
2	Raw Material Transfer point of Mixture (Mixture Building)	193	988
3	Ball Mill (Cool Grinding)	203	1008
4	Ball Mill (Flux & Coke Grinding)	196	979
5	Finished Product Transfer points and plant de-dusting system	173	923
6	Travelling Grate & Rotary Kiln	187	937
MoEF Standard		--	2000*

* The standard is applicable at 10 m distance from the source


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Reference No : CEMC/ASL/Dec -N-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Noise Monitoring Report
Date of Monitoring : 13.12.2019
Sample Collected by : Mr. B Samantaray

NOISE LEVEL STUDY REPORT

Sl. No.	Location	Noise Level In Day Time dB(A)	Noise Level In Night Time dB(A)
01	Ball Mill (Cool Grinding)	74.3	69.2
02	Raw Material Transfer point of Mixture (Mixture Building)	73.1	66.7

NATIONAL STANDARD NOISE LEVEL

Area Code	Category of Area/Zone	Permissible Limit in dB (A)	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40


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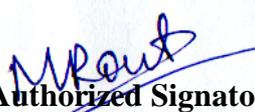
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Reference No : CEMC/ASL/Dec -ST-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Stack Monitoring
Date of Monitoring : 13.12.2019
Date of Receiving : 14.12.2019
Date of Analysis : 14.12.2019
Sample Collected by : Mr. B Samantaray
Stack Height : 30m

STACK EMISSION REPORT

Sl. No.	Location of Sampling	Flue Gas Temp. in K	Concentration of Particulate Matter (PM) in mg/Nm ³
			Result
01	ESP	394	46.5


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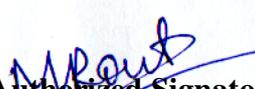
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Reference No : CEMC/ASL/Dec-GW-01/19
 Name of Company : Ardent Steel Ltd.
 Sample Description : Ground Water
 Date of Monitoring : 13.12.2019
 Date of Receiving : 14.12.2019
 Date of Analysis : 14.12.2019
 Sample Collected by : Mr. B Samantaray
 Sample Location : RO Water

GROUND WATER TEST REPORT

Sl. No	Parameter	Unit	Desired Limit of drinking water (BIS:10500:2012)	Permissible Limit of drinking water (BIS:10500:2012)	Result
1	Colour	Hazen	5	15	<5
2	Odour	-	Agreeable	Agreeable	AL
3	Taste	-	Agreeable	-	AL
4	Turbidity	NTU	1	5	<1
5	pH Value @ 25°C	-	6.5-8.5	No Relaxation	6.96
6	Total Dissolved Solid	mg/l	500	2000	62
7	Alkalinity as CaCO ₃	mg/l	200	600	30
8	Total Hardness as CaCO ₃	mg/l	200	600	34
9	Iron as Fe	mg/l	0.3	No Relaxation	0.06
10	Nitrate as NO ₃ ⁻ -N	mg/l	45	No Relaxation	0.20
11	Sulphate as SO ₄	mg/l	200	400	1.3
12	Fluoride as F	mg/l	1.0	1.5	<0.05
13	Calcium as Ca	mg/l	75	200	9.62
14	Chloride as Cl ⁻	mg/l	250	1000	3.1

N.B: AL – Agreeable


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Reference No	:	CEMC/ASL/Dec -SW-01/19
Name of Company	:	Ardent Steel Ltd.
Sample Description	:	Surface Water
Date of Sampling	:	13.12.2019
Date of Receiving	:	14.12.2019
Date of Analysis	:	14.12.2019
Sample Collected by	:	Mr. B Samantaray
Sample Location	:	Reservoir

SURFACE WATER TEST REPORT

Sl. No	Parameter	Unit	GSR 422E Standards	Result
1	Colour	Hazen	--	9
2	Odour	-	--	U/O
3	pH Value @ 25°C	-	5.5-9.0	7.06
4	Total Dissolved Solid	mg/l	2100	331.2
5	Iron as Fe	mg/l	3.0	0.39
6	Sulphate as SO ₄	mg/l	1000	16.8
7	Nitrate as NO ₃ ⁻ -N	mg/l	50	10.3
8	Boron as B	mg/l	2.0	0.19
9	BOD for 3 days @ 27°C	mg/l	30	2.2
10	COD	mg/l	250	20

N.B: U/O- Un-objectionable


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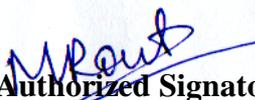
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Reference No : CEMC/ASL/Dec-WW-01/19
Name of Company : Ardent Steel Ltd.
Sample Description : Waste Water
Date of Sampling : 13.12.2019
Date of Receiving : 14.12.2019
Date of Analysis : 14.12.2019
Sample Collected by : Mr. B Samantaray
Sample Location : STP Outlet

ANALYSIS RESULT

Sl. No.	Parameter	Unit	Effluent Discharge Standard	Testing Method	Result
1.	pH Value @ 25°C	--	6.5-9.0	APHA 4500 H ⁺ B	7.23
2.	Total Suspended Solids	mg/l	<20	APHA 2540 D	17.3
3.	B.O.D for 3 days @ 27°C	mg/l	<10	APHA 5210 B	9.8
4.	COD	mg/l	<50	APHA 5220 C	44
5.	Oil & Grease	mg/l	--	APHA 5520 B	2.9


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